

CLAIMS

We claim:

1. A method of delivering a moiety of interest into a cell comprising contacting the cell with a complex comprising the moiety of interest covalently linked to a heat shock protein, under conditions appropriate for entry of the complex into the cell.
5
2. The method of Claim 1 wherein the heat shock protein is selected from the group consisting of:
10 mycobacterial heat shock proteins, human heat shock proteins, yeast heat shock proteins, bacterial heat shock proteins, nonhuman mammalian heat shock proteins, insect heat shock proteins and fungal heat shock proteins.
- 15 3. The method of Claim 2 wherein the heat shock protein is a mycobacterial heat shock protein selected from the group consisting of: hsp65, hsp70, hsp60, hsp71, hsp90, hsp100, hsp10-12, hsp20-30, hsp40 and hsp100-200.
- 20 4. The method of Claim 3 wherein the moiety is selected from the group consisting of: proteins, peptides, lipids, carbohydrates, glycoproteins and small organic molecules.
- 25 5. A method of delivering a moiety of interest into an antigen presenting cell comprising contacting the cell with a complex comprising the moiety of interest covalently linked to a heat shock protein, under conditions appropriate for entry of the complex into the cell.

6. The method of Claim 5 wherein the heat shock protein
is selected from the group consisting of:
mycobacterial heat shock proteins, human heat shock
proteins, yeast heat shock proteins, bacterial heat
shock proteins, nonhuman mammalian heat shock
proteins, insect heat shock proteins and fungal heat
shock proteins.

5

7. The method of Claim 6 wherein the heat shock protein
is a mycobacterial heat shock protein selected from
the group consisting of: hsp65, hsp70, hsp60, hsp71,
10 hsp90, hsp100, hsp10-12, hsp20-30, hsp40 and hsp100-
200.

15

8. The method of Claim 7 wherein the moiety is selected
from the group consisting of: proteins, peptides,
lipids, carbohydrates, glycoproteins and small organic
molecules.

15

9. A method of delivering a moiety of interest into a
cell capable of taking up a complex comprising the
moiety of interest covalently linked to a heat shock
protein, comprising contacting the cell with the
complex, under conditions appropriate for entry of the
complex into the cell.

20

10. The method of Claim 9 wherein the heat shock protein
is selected from the group consisting of:
mycobacterial heat shock proteins, human heat shock
proteins, yeast heat shock proteins, bacterial heat
shock proteins, nonhuman mammalian heat shock
proteins, insect heat shock proteins and fungal heat
shock proteins.

25

11. The method of Claim 10 wherein the heat shock protein
is a mycobacterial heat shock protein selected from
the group consisting of: hsp65, hsp70, hsp60, hsp71,
hsp90, hsp100, hsp10-12, hsp20-30, hsp40 and hsp100-
200.

5

12. The method of Claim 11 wherein the moiety is selected
from the group consisting of: proteins, peptides,
lipids, carbohydrates, glycoproteins and small organic
molecules.

10 13. A method of delivering a moiety of interest into a
cell of an individual comprising contacting the cell
with a complex comprising the moiety of interest
covalently linked to a heat shock protein, under
conditions appropriate for entry of the complex into
15 the cell.

14. The method of Claim 13 wherein the heat shock protein
is selected from the group consisting of:
mycobacterial heat shock proteins, human heat shock
proteins, yeast heat shock proteins, bacterial heat
shock proteins, nonhuman mammalian heat shock
20 proteins, insect heat shock proteins and fungal heat
shock proteins.

15. The method of Claim 14 wherein the heat shock protein
is a mycobacterial heat shock protein selected from
25 the group consisting of: hsp65, hsp70, hsp60, hsp71,
hsp90, hsp100, hsp10-12, hsp20-30, hsp40 and hsp100-
200.

16. The method of Claim 15 wherein the moiety is selected
from the group consisting of: proteins, peptides,

lipids, carbohydrates, glycoproteins and small organic molecules.

17. A method of delivering a moiety of interest into an antigen presenting cell of an individual comprising
5 contacting the cell with a complex comprising the moiety of interest covalently linked to a heat shock protein, under conditions appropriate for entry of the complex into the cell.

18. The method of Claim 17 wherein the heat shock protein
10 is selected from the group consisting of:
mycobacterial heat shock proteins, human heat shock proteins, yeast heat shock proteins, bacterial heat shock proteins, nonhuman mammalian heat shock proteins, insect heat shock proteins and fungal heat shock proteins.
15

19. The method of Claim 18 wherein the heat shock protein is a mycobacterial heat shock protein selected from the group consisting of: hsp65, hsp70, hsp60, hsp71, hsp90, hsp100, hsp10-12, hsp20-30, hsp40 and hsp100-
20 200.

20. The method of Claim 19 wherein the moiety is selected from the group consisting of: proteins, peptides, lipids, carbohydrates, glycoproteins and small organic molecules.

25 21. A method of delivering a moiety of interest into a cell of an individual wherein the cell is capable of taking up a complex comprising the moiety of interest covalently linked to a heat shock protein, comprising contacting the cell with the complex under conditions appropriate for entry of the complex into the cell.
30

22. The method of Claim 21 wherein the heat shock protein
is selected from the group consisting of:

5 mycobacterial heat shock proteins, human heat shock
proteins, yeast heat shock proteins, bacterial heat
shock proteins, nonhuman mammalian heat shock
proteins, insect heat shock proteins and fungal heat
shock proteins.

23. The method of Claim 22 wherein the heat shock protein
is a mycobacterial heat shock protein selected from

10 the group consisting of: hsp65, hsp70, hsp60, hsp71,
hsp90, hsp100, hsp10-12, hsp20-30, hsp40 and hsp100-
200.

15 24. The method of Claim 23 wherein the moiety is selected
from the group consisting of: proteins, peptides,
lipids, carbohydrates, glycoproteins and small organic
molecules.

RECEIVED
U.S. PATENT AND TRADEMARK OFFICE